STATES TO STATES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Laboratory

Environmental Services Branch 10625 Fallstone Road, Houston, TX 77099 Phone: (281)983-2100 Fax: (281)983-2248

Final Analytical Report

Site Name ----- Wilcox Oil

Sample Collection Date(s)-- 09/19/16 - 09/22/16

Contact----- Katrina Coltrain(6SF-LP)

Report Date----- 12/14/16

Project #----- 16SF126

Work Order(s)----- 1609020

1609027

1609031

Analyses included in this report:

Cyanide 335.4 Metals ICP CLP Metals Mercury CLP (E) VOA CLP Low Level LC IC-UV Hexavalent Chromium Metals ICP/MS CLP P/P 8011 EDB

Report Narrative

Volatiles:

Acetone, where reported, is qualified as estimated due to failure of this analyte in the second source verification for the initial calibration. This analyte is also qualified as blank related, where reported in field samples, due to presence of this analyte in the associated analysis blank and/or field blank. [Note: Both B and FB qualifiers were used for samples in work order 1609020 because there was no clear cut qualifier to use (lab and field contamination approximately equal). Samples in work order 1609031 were qualified using only FB because concentrations of Acetone in field blanks were significantly higher than laboratory contamination.]

Bromomethane is qualified as blank related in all samples due to the presence of this analyte in the associated analysis blank.

Batch B6I2805: One analyte fails in the BS but should not affect the data.

Standard procedures for quality assurance and quality control were followed in the analysis and reporting of the sample results. The results apply only to the samples tested. This final report should only be reproduced in full.

The reporting limit (sometimes referred to as a quantitation limit) is defined as the lowest concentration at which an analyte can be reliably measured and reported without qualification. Reporting limits are adjusted for sample size, dilution, and matrix interference. Concentrations below the reporting limit are reported as non-detects or <RL.

Report Approvals:

RICHARD MCMILLIN

Digitally signed by RICHARD MCMILLIN
DN: c=US, o=U.S. Government, ou=USEPA, ou=Staff,
cn=RICHARD MCMILLIN, dnQualifier=0000008516
Date: 2016.12.14 16:00:10 -06'00'

PROTECTOR

Please provide a reason for holding:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 6 Environmental Services Branch Laboratory

10625 Fallstone Road Houston, Texas 77099

Sample Receipt and Disposal

Site Name: Wilcox Oil	Project Number: 16SF126
Data Management Coordinator: Christy Warren	/ /
Data Management Coordinator Signature	Date
Date Transmitted:/	
Please have the U.S. EPA Project Manager/Officer call comments or questions.	the Data Management Coordinator at 3-2137 for any
Please sign and date this form below and return it with	any comments to:
Christy Warren Data Management Coordinator Region 6 Laboratory 6MD-HS	
Received by and Date	
Comments:	
The laboratory routinely disposes of samples 90 days a hold these samples in custody longer than 90 days, pleater	fter all analyses have been completed. If you have a need to ase sign below.
Signature	Date



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

ANALYTICAL REPORT FOR SAMPLES

Station ID	Laboratory ID	Sample Type	Date Collected	Date Received
GW-03	1609020-01	Liquid	9/19/16 15:44	09/20/16 09:40
GW-04	1609020-02	Liquid	9/19/16 14:30	09/20/16 09:40
GW-06	1609020-03	Liquid	9/19/16 17:07	09/20/16 09:40
TB-160919-1	1609020-04	Liquid	9/19/16 13:30	09/20/16 09:40
GW-07	1609027-01	Liquid	9/21/16 10:59	09/22/16 09:20
GW-09	1609027-02	Liquid	9/21/16 16:51	09/22/16 09:20
GW-12	1609027-03	Liquid	9/21/16 13:32	09/22/16 09:20
GW-17	1609027-04	Liquid	9/21/16 17:36	09/22/16 09:20
ER-160922	1609031-01	Liquid	9/22/16 13:40	09/23/16 09:05
GW-07	1609031-02	Liquid	9/21/16 10:59	09/23/16 09:05
GW-08	1609031-03	Liquid	9/22/16 14:25	09/23/16 09:05
GW-08-D	1609031-04	Liquid	9/22/16 14:25	09/23/16 09:05
GW-09	1609031-05	Liquid	9/21/16 16:51	09/23/16 09:05
GW-10	1609031-06	Liquid	9/22/16 15:23	09/23/16 09:05
GW-10-D	1609031-07	Liquid	9/22/16 15:23	09/23/16 09:05
GW-12	1609031-08	Liquid	9/21/16 13:32	09/23/16 09:05
GW-13-119	1609031-09	Liquid	9/22/16 12:29	09/23/16 09:05
GW-14	1609031-10	Liquid	9/22/16 10:03	09/23/16 09:05
GW-17	1609031-11	Liquid	9/21/16 17:36	09/23/16 09:05
TB-160920-1	1609031-12	Liquid	9/20/16 9:00	09/23/16 09:05
TB-160922-1	1609031-13	Liquid	9/22/16 9:00	09/23/16 09:05
GW-09-Cr6	1609031-14	Liquid	9/22/16 14:00	09/23/16 09:05



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

QC SUMMARY REPORT

LC IC-UV Hexavalent Chromium B6J0411				
Liquid				
Samples: 14	ReExts: 0			
LAB NUMBER	SOURCE			
B6J0411-BLK1				
B6J0411-MS1	1609031-09			
B6J0411-MSD1	1609031-09			

Metals ICP CLP B612712 Liquid				
Samples: 14	ReExts: 0			
LAB NUMBER	SOURCE			
B6l2712-BLK1				
B6I2712-BS1				
B6I2712-MS1	1609020-02			
B6I2712-MS2	1609031-10			
B6I2712-MSD1	1609020-02			
B6 2712-MSD2	1609031-10			

Metals ICP/MS CLP B6I2713 Liquid				
Samples: 14	ReExts: 0			
LAB NUMBER	SOURCE			
B6 2713-BLK1				
B6l2713-BS1				
B6I2713-MS1	1609020-02			
B6I2713-MS2	1609031-10			
B6I2713-MSD1	1609020-02			
B6I2713-MSD2	1609031-10			

Metals Mercury CLP (E) B6J0412 Liquid					
Samples: 14	ReExts: 0				
LAB NUMBER	SOURCE				
B6J0412-BLK1					
B6J0412-BLK2					
B6J0412-BLK3					
B6J0412-BLK4					
B6J0412-BS1					
B6J0412-MS1	1609020-02				
B6J0412-MS2	1609031-10				
B6J0412-MSD1	1609020-02				
B6J0412-MSD2	1609031-10				



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Fax:(281)983-2248 Phone:(281)983-2100

P/P 8011 EDB B6I2714 Liquid				
Samples: 16	ReExts: 0			
LAB NUMBER	SOURCE			
B6l2714-BLK1				
B6I2714-BS1				
B6I2714-BS2				
B6I2714-BS3				
B6I2714-BS4				
B6I2714-BS5				
B6I2714-BS6				
B6I2714-BS7				
B6I2714-BS8				
B6I2714-BS9				
B6I2714-BSD1				
B6I2714-MS1	1609020-02			
B6I2714-MSD1	1609020-02			

VOA CLP Low Level				
B61	2805			
Liquid				
Samples: 16	ReExts: 0			
LAB NUMBER	SOURCE			
B6I2805-BLK1				
B6I2805-BS1				
B6 2805-MS1	1609020-02			
B6I2805-MSD1	1609020-02			

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609020-01

Batch: B6I2712 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 50ml

Station ID: GW-03

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
,	U U	Qualificis	100	1	09/28/16	10/21/16
Aluminum (7429-90-5)	-			1		
Barium (7440-39-3)	98.6		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	16,700		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	23.0		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	10,100		150	"	"	"
Manganese (7439-96-5)	12.5		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,700		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	14,200		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-03 Lab ID: 1609020-01

Batch: B6I2713 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Lab ID: 1609020-01 Station ID: GW-03

Batch: B6I2714 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 36.542ml

Sample Vol: 36.542ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	"

Project #: 16SF126 Report Name:



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-01 Station ID: GW-03

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	54.6		109	86-117	09/27/16	09/27/16
Toluene-d8	53.0		106	85-113	"	"
4-Bromofluorobenzene	46.6		93.1	73-115	"	"

Targets

Analyta (CAS Number)	Result	Analyte Qualifiers	Reporting	Diletter	D 1	A1
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.6	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	8.2	B, FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-01 Station ID: GW-03

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 5ml

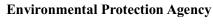
Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609020-01 Station ID: GW-03

Batch: B6J0411 Date Collected: 09/19/16

Sample Type: Liquid Sample Vol: 10ml; Final Vol: 10ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	3.49		0.120	1	2	09/29/16	09/29/16

Project #: 16SF126 Report Name:



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-03 Lab ID: 1609020-01

Batch: B6J0412 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 25ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609020-02

Batch: B6I2712 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-04

Targets

Analyte (CAS Number)	Result	Analyte Qualifiers	Reporting	Dilution	Dronored	Analyzad
Allaryte (CAS Nulliber)	μg/L	Qualificis	Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	22.2		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	42,200		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	16,600		150	"	"	"
Manganese (7439-96-5)	U		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,060		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	39,100		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-04 Lab ID: 1609020-02

Batch: B6I2713 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-04 Lab ID: 1609020-02

Batch: B6I2714 Date Collected: 09/19/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.285ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Report Name: Project #: 16SF126

Page 13 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-02 Station ID: GW-04

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	50.6		101	86-117	09/27/16	09/27/16
Toluene-d8	49.2		98.4	85-113	"	"
4-Bromofluorobenzene	42.8		85.6	73-115	"	"

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.3	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	7.8	B, FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 14 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-02 Station ID: GW-04

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 5ml

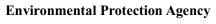
Sample Qualifiers:

Targets (Continued)

	_					
Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Station ID: GW-04 Lab ID: 1609020-02

Batch: B6J0411 Date Collected: 09/19/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	0.829		0.060	1	1	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 16 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-04 Lab ID: 1609020-02

Batch: B6J0412 Date Collected: 09/19/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Report Name: Project #: 16SF126

Page 17 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609020-03

Batch: B6I2712 Date Collected: 09/19/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 50ml

Station ID: GW-06

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	61.4		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	52,500		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	79.0		25.0	"	"	"
Magnesium (7439-95-4)	18,000		150	"	"	"
Manganese (7439-96-5)	5.9		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,510		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	47,300		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-06 Lab ID: 1609020-03

Batch: B6I2713 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-06 Lab ID: 1609020-03

Batch: B6I2714 Date Collected: 09/19/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 36.744ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Report Name: Project #: 16SF126

Page 20 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-03 Station ID: GW-06

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result μg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	49.4		98.7	86-117	09/27/16	09/27/16
Toluene-d8	48.2		96.3	85-113	"	"
4-Bromofluorobenzene	42.7		85.5	73-115	"	"

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	$\mu g/L$	Qualifiers	Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.4	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	6.4	B, FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-03 Station ID: GW-06

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 5ml

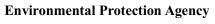
Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609020-03 **Station ID: GW-06**

Batch: B6J0411 Date Collected: 09/19/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	3.63		0.120	1	2	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 23 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1609020-03 Station ID: GW-06

Batch: B6J0412 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 25ml

Sample Vol: 25ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Project #: 16SF126 Report Name:

Page 24 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Lab ID: 1609020-04 Station ID: TB-160919-1

Batch: B6I2714 Date Collected: 09/19/16 Sample Type: Liquid Sample Vol: 36.82ml

Sample Vol: 36.82ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Project #: 16SF126 Report Name:



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Station ID: TB-160919-1 Lab ID: 1609020-04

Batch: B6I2805 Date Collected: 09/19/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	53.4		107	86-117	09/27/16	09/27/16
Toluene-d8	54.7		109	85-113	"	"
4-Bromofluorobenzene	46.6		93.2	73-115	"	"

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Dranaga	Analyzed
Dichlorodifluoromethane (75-71-8)		Quantitiers				09/27/16
· · · · ·	U		1.0	1	09/27/16	09/2//16
Chloromethane (74-87-3)	U		1.0	"	"	
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.7	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	U		5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 26 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609020-04 Station ID: TB-160919-1

Batch: B6I2805 Date Collected: 09/19/16 Sample Type: Liquid

Sample Vol: 5ml Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609027-01

Batch: B6I2712

Sample Type: Liquid

Date Collected: 09/21/16 Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-07

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	60.6		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	13,200		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	5,470		150	"	"	"
Manganese (7439-96-5)	U		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,580		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	6,390		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

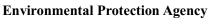
Station ID: GW-07 Lab ID: 1609027-01

Batch: B6I2713 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609027-01 Station ID: GW-07

Batch: B6J0411 Date Collected: 09/21/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	4.63		0.120	1	2	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 30 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-07 Lab ID: 1609027-01

Batch: B6J0412 Date Collected: 09/21/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609027-02

Batch: B6I2712 Date Collected: 09/21/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 50ml

Station ID: GW-09

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
		Qualificis		Dilution	•	
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	213		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	38,900		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	33.0		20.0	"	"	"
Iron (7439-89-6)	52.6		25.0	"	"	"
Magnesium (7439-95-4)	20,900		150	"	"	"
Manganese (7439-96-5)	27.0		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	2,690		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	47,300		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	156		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-09 Lab ID: 1609027-02

Batch: B6I2713 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	8.0		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Lab ID: 1609027-02 Station ID: GW-09

Batch: B6J0412 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 25ml

Sample Vol: 25ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Project #: 16SF126 Report Name:

Page 34 of 129

Environmental Protection Agency Region 6 Laboratory



10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609027-03

Batch: B6I2712 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-12

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	50.8		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	46,700		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	15,700		150	"	"	"
Manganese (7439-96-5)	23.3		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,530		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	8,070		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

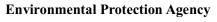
Station ID: GW-12 Lab ID: 1609027-03

Batch: B6I2713 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609027-03 **Station ID: GW-12**

Batch: B6J0411 Date Collected: 09/21/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	0.314		0.060	1	1	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 37 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-12 Lab ID: 1609027-03

Batch: B6J0412 Date Collected: 09/21/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609027-04

Batch: B6I2712

Sample Type: Liquid

Date Collected: 09/21/16

Sample Qualifiers: Sample Vol: 50ml

Station ID: GW-17

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	139		100	1	09/28/16	10/21/16
Barium (7440-39-3)	58.3		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	51,300		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	129		25.0	"	"	"
Magnesium (7439-95-4)	17,000		150	"	"	"
Manganese (7439-96-5)	10.8		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,370		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	28,100		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	56.8		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

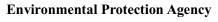
Station ID: GW-17 Lab ID: 1609027-04

Batch: B6I2713 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609027-04 Station ID: GW-17

Batch: B6J0411 Date Collected: 09/21/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	4.92		0.120	1	2	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 41 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-17 Lab ID: 1609027-04

Batch: B6J0412 Date Collected: 09/21/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Station ID: ER-160922 Lab ID: 1609031-01

Batch: B6I2712 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	U		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	U		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	U		150	"	"	"
Manganese (7439-96-5)	U		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	U		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	U		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	n	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: ER-160922 Lab ID: 1609031-01

Batch: B6I2713 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 50ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: ER-160922 Lab ID: 1609031-01

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.475ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Station ID: ER-160922 Lab ID: 1609031-01

Batch: B6I2805 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	51.0		102	86-117	09/27/16	09/27/16
Toluene-d8	50.3		101	85-113	"	"
4-Bromofluorobenzene	42.9		85.9	73-115	"	"

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.6	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	24.3	J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 46 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-01 Station ID: ER-160922

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid

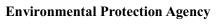
Sample Vol: 5ml Sample Qualifiers:

Targets (Continued)

A 1 ((GAGN 1)	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609031-01 Station ID: ER-160922

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Vol: 10ml; Final Vol: 10ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	U		0.060	1	1	09/29/16	09/29/16

Project #: 16SF126 Report Name:

Page 48 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: ER-160922 Lab ID: 1609031-01

Batch: B6J0412 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-07 Lab ID: 1609031-02

Batch: B6I2714 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 36.957ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-02 Station ID: GW-07

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result μg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	48.9		97.8	86-117	09/27/16	09/27/16
Toluene-d8	48.6		97.3	85-113	"	"
4-Bromofluorobenzene	41.6		83.2	73-115	"	"

Targets

Chloromethane (74-87-3) U 1.0 " " " Vinyl chloride (75-01-4) U 1.0 " " " " Bromomethane (74-83-9) 1.7 B 1.0 " " " " Chlorocethane (75-00-3) U 1.0 " " " " " Trichlorofluoromethane (75-69-4) U 1.0 "	Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Norther Chloride (75-01-4) Winyl chloride (75-01-4) Bromomethane (75-89-9) 1.7 B 1.0 " " " " " " " " " " " " " " " " " " "	Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Strommethane (73-01-34) 1.7 B 1.0 " " " " " " " " "	Chloromethane (74-87-3)	U		1.0	"	"	"
Chloroethane (75-00-3) Chloroethane (75-69-4) U 1,1-Dichloroethane (75-35-4) U 1,1-Dichloroethane (75-35-4) U 1,1-Z-Trichloro-1,2,2-trifluoroethane (76-13-1) Methylene chloride (75-09-2) Methylene chloride (75-09-2) Wethyla cetate (79-20-9) U 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Vinyl chloride (75-01-4)	U		1.0	"	"	"
Christellane (73-08-3) Trichlorofluoromethane (75-69-4) U 1,1-Dichloroethene (75-35-4) U 1,1-Dichloroethene (75-35-4) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) Methylene chloride (75-09-2) Methyla acetate (79-20-9) U 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Bromomethane (74-83-9)	1.7	В	1.0	"	"	"
1,1-Dichloroethene (75-35-4) Carbon disulfide (75-15-0) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) U 1,1,0 1,1,0 1,0 1,0 1,0 1,0 1,0 1,0 1,0	Chloroethane (75-00-3)	U		1.0	"	"	"
Carbon disulfide (75-15-0) U 1.0 " " " " 1.1,2-Trichloro-1,2,2-trifluorethane (76-13-1) U 1.0 " " " " " " 1.1,2-Trichloro-1,2,2-trifluorethane (76-13-1) U 1.0 " " " " " " " " " " " " " " " " " " "	Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
Carbon distribute (73-13-0) U 1.0 " " " Acetone (67-64-1) 5.4 FB, J 5.0 " " " " Methylene chloride (75-09-2) U 2.0 " " " " Methyl acetate (79-20-9) U 1.0 " " " " Methyl acetate (79-20-9) U 1.0 " " " " Methyl acetate (79-20-9) U 1.0 " " " " Methyl acetate (79-20-9) U 1.0 " " " " " Wethyl acetate (79-20-9) U 1.0 "	1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Acetone (67-64-1) 5.4 FB, J 5.0 """"""""""""""""""""""""""""""""""""	Carbon disulfide (75-15-0)	U		1.0	"	"	"
Methylene chloride (75-09-2) Methyl acetate (79-20-9) U 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Methyl acetate (79-20-9) Methyl acetate (79-20-9) U 1.0 1.0 " " trans-1,2-Dichloroethene (156-60-5) U 1.0 " " " Methyl tert-butyl ether (1634-04-4) U 1.0 " " 1,1-Dichloroethane (75-34-3) U 1.0 " " " 1,1-Dichloroethane (78-93-3) U 1.0 " " " Chloroform (67-66-3) U 1.0 " " " 1,2-Dichloroethane (107-06-2) U 1.0 " " 1,1,1-Trichloroethane (71-55-6) U 1.0 " " 1,1,1-Trichloroethane (71-55-6) U 1.0 " " " 1,1,1-Trichloroethane (71-55-6) U 1.0 " " " " Carbon tetrachloride (56-23-5) U 1.0 " " " " " Trichloroethene (79-01-6) W Methylcyclohexane (108-87-2) U 1.0 " " " " " " " " " " " " " " " " " "	Acetone (67-64-1)	5.4	FB, J	5.0	"	"	"
trans-1,2-Dichloroethene (156-60-5) U 1.0 " " " " " cis-1,2-Dichloroethene (156-59-2) U 1.0 " " " " " " " " " " " " " " " " " " "	Methylene chloride (75-09-2)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2) U 1.0 " " " Methyl tert-butyl ether (1634-04-4) U 1.0 " " " 1,1-Dichloroethane (75-34-3) U 1.0 " " " 2-Butanone (78-93-3) U 5.0 " " " " Chloroform (67-66-3) U 1.0 "	Methyl acetate (79-20-9)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4) Methyl tert-butyl ether (1634-04-4) U 1.0 1.0 " " " 1,1-Dichloroethane (75-34-3) U 2-Butanone (78-93-3) U 5.0 " " " " Chloroform (67-66-3) U 1.0 " " " 1,2-Dichloroethane (107-06-2) U 1.0 " " " " Cyclohexane (110-82-7) Cyclohexane (110-82-7) Carbon tetrachloride (56-23-5) U 1.0 " " " " " Carbon tetrachloride (79-01-6) W Methylcyclohexane (108-87-2) U 1.0 " " " " " " " " " " " " " " " " " "	trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3) U 1.0 1.0 " " " 2-Butanone (78-93-3) U 5.0 " " " " Chloroform (67-66-3) U 1.0 " " " 1,2-Dichloroethane (107-06-2) U 1.0 " " " " " Cyclohexane (110-82-7) U 1.0 Carbon tetrachloride (56-23-5) U 1.0 U 1.0 " " " " " Carbon tetrachloride (56-23-5) U 1.0 " " " " " " " Methylcyclohexane (108-87-2) U 1.0 " 1.0 " " " " " " " " " " " " " " " " " "	cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
2-Butanone (78-93-3) U 5.0 " " " " " " 1,2-Dichloroform (67-66-3) U 1.0 " " " " " 1,1,1-Trichloroethane (71-55-6) U 1.0 " " " " " " Cyclohexane (110-82-7) U 1.0 " " " " " " " " Carbon tetrachloride (56-23-5) U 1.0 " " " " " " " " " Trichloroethane (79-01-6) U 1.0 " " " " " " " " " " " " " " " " " " "	Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
Chloroform (67-66-3) U 1,2-Dichloroethane (107-06-2) U 1,1,1-Trichloroethane (71-55-6) U Cyclohexane (110-82-7) Carbon tetrachloride (56-23-5) Benzene (71-43-2) Trichloroethene (79-01-6) Methylcyclohexane (108-87-2) U 1,0 """ "" "" 1,2-Dichloropropane (78-87-5) U 1,0 """ "" "" "" "" "" "" "" ""	1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2) 1,1,1-Trichloroethane (71-55-6) U 1,0 U 1,	2-Butanone (78-93-3)	U		5.0	"	"	"
1,1,1-Trichloroethane (71-55-6) U 1.0 " " " Cyclohexane (110-82-7) U 1.0 " " " " Carbon tetrachloride (56-23-5) U 1.0 " " " " Benzene (71-43-2) U 1.0 " " " " Trichloroethene (79-01-6) U 1.0 " " " " Methylcyclohexane (108-87-2) U 1.0 " " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " "	Chloroform (67-66-3)	U		1.0	"	"	"
Cyclohexane (110-82-7) U 1.0 " </td <td>1,2-Dichloroethane (107-06-2)</td> <td>U</td> <td></td> <td>1.0</td> <td>"</td> <td>"</td> <td>"</td>	1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5) Benzene (71-43-2) Trichloroethene (79-01-6) Methylcyclohexane (108-87-2) U 1.0 " " " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " " " " " " " " " " " " " " " "	1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Carbon tetractionide (36-23-3) U 1.0 " " " Benzene (71-43-2) U 1.0 " " " " Trichloroethene (79-01-6) U 1.0 " " " " Methylcyclohexane (108-87-2) U 1.0 " " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " "	Cyclohexane (110-82-7)	U		1.0	"	"	"
Trichloroethene (79-01-6) Methylcyclohexane (108-87-2) U 1.0 " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " " "	Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Methylcyclohexane (108-87-2) U 1.0 " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " "	Benzene (71-43-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5) U 1.0 """ """	Trichloroethene (79-01-6)	U		1.0	"	"	"
1,2-Diemoropropane (78-87-3)	Methylcyclohexane (108-87-2)	U		1.0	"	"	"
Bromodichloromethane (75-27-4) U 1.0 " "	1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
	Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-02 Station ID: GW-07

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609031-03

Batch: B6I2712 Sample Type: Liquid Date Collected: 09/22/16 Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-08

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	29.5		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	42,600		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	28.8		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	16,300		150	"	"	"
Manganese (7439-96-5)	U		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	10,500		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	10,600		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-08 Lab ID: 1609031-03

Batch: B6I2713 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-08 Lab ID: 1609031-03

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.443ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-03 Station ID: GW-08

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	51.3		103	86-117	09/27/16	09/27/16
Toluene-d8	51.8		104	85-113	"	"
4-Bromofluorobenzene	44.8		89.7	73-115	"	"

Targets

Chloromethane (74-87-3) U	Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
North Chloride (75-01-4) Bromomethane (74-87-9) Chloroethane (75-00-3) U 1.0 " Trichlorofluoromethane (75-69-4) U 1.1,1-Dichloroethane (75-35-4) U 1.0 " Carbon disulfide (75-15-0) U 1.0 " Carbon disulfide (75-15-0) U 1.0 " Acetone (67-64-1) 8.2 FB, J 5.0 " Methylene chloride (75-09-2) Methyl acetate (79-20-9) U trans-1,2-Dichloroethene (156-60-5) U 1.0 " Methyl tert-butyl ether (163-40-44) U 1,1-Dichloroethane (75-34-3) U 1,1-Dichloroethane (75-34-3) U 1,1-Dichloroethane (75-34-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-34-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-36-3) U 1,1-Dichloroethane (75-69-2) U 1,1-Dichloroethane (75-36-3) U	Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Strommethane (74-83-9) 2.1 B 1.0 " " " " " Trichlorothane (75-00-3) U 1.0 " " " " " " " " "	Chloromethane (74-87-3)	U		1.0	"	"	"
Chloroethane (75-00-3) Chloroethane (75-69-4) U 1,1-Dichloroethane (75-35-4) U 1,1-Dichloroethane (75-35-4) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) Methylene chloride (75-09-2) Methyla cetate (79-20-9) U 1,0 1,0 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1,0 1 1 1,0 1 1 1,0 1 1 1,0 1 1 1,0 1 1 1 1 Acetone (67-64-1) 8.2 FB, J 5.0 1 1 1 Methyla cetate (79-20-9) U 1.0 1.0 1 1.0 1 1 1 1 1 1 1 1 1 1 1 1 1	Vinyl chloride (75-01-4)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4) U 1,0 " " 1,1-Dichloroethene (75-35-4) U 1,0 " " Carbon disulfide (75-15-0) U 1,0 " " 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) U 1,0 " " Acetone (67-64-1) 8.2 FB, J 5,0 " " Methylene chloride (75-09-2) U 1,0 " " Methyla cetate (79-20-9) U 1,0 " " Methyla cetate (79-20-9) U 1,0 " " Methyla cetate (156-60-5) U 1,0 " " visa-1,2-Dichloroethene (156-60-5) U 1,0 " " Methyl tert-butyl ether (1634-04-4) U 1,0 " " 1,1-Dichloroethane (75-34-3) U 1,0 " " 2-Butanone (78-93-3) U 1,0 " " Chloroform (67-66-3) U 1,0 " "	Bromomethane (74-83-9)	2.1	В	1.0	"	"	"
1,1-Dichloroethene (75-35-4)	Chloroethane (75-00-3)	U		1.0	"	"	"
Carbon disulfide (75-15-0) Carbon disulfide (75-15-0) U 1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) U 1,2-Trichloro-1,2,2-trifluoroethane (76-13-1) Wethylene chloride (75-09-2) U 1,0 Wethylene chloride (75-09-2) U 1,0 Wethyl acetate (79-20-9) U 1,0 U 1,1-Dichloroethane (75-34-3) U 1,1-Dichloroethane (75-34-3) U 1,2-Dichloroethane (75-34-3) U 1,2-Dichloroethane (107-06-2) U 1,1,1-Trichloroethane (71-55-6) U 1,1,1-Trichloroethane (71-55-6) U 1,1,1-Trichloroethane (71-55-6) U 1,1,1-Trichloroethane (71-63-3) U 1,2-Dichloroethane (71-63-3) U 1,2-Dichloroethane (71-69-2) U 1,0	Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
Carbon distrible (73-13-6) Carbon distrible (73-13-6) Carbon (67-64-1) Cactone (156-60-2) Cactone (156-60-5) Cactone (156-60-5) Cactone (156-59-2) Cactone (156-59-2) Cactone (1634-04-4) Cactone (1634-04-4) Cactone (78-93-3) Cactone (78-93-3) Cactone (78-93-3) Cactone (78-93-3) Cactone (78-93-3) Cactone (107-06-2) Cactone (110-82-7) Cactone (110-82	1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Acetone (67-64-1) 8.2 FB, J 5.0 " " Methylene chloride (75-09-2) U 2.0 " " Methyl acetate (79-20-9) U 1.0 " " trans-1,2-Dichloroethene (156-60-5) U 1.0 " " cis-1,2-Dichloroethene (156-59-2) U 1.0 " " Methyl tert-butyl ether (1634-04-4) U 1.0 " " 1,1-Dichloroethane (75-34-3) U 1.0 " " 2-Butanone (78-93-3) U 5.0 " " Chloroform (67-66-3) U 1.0 " " 1,2-Dichloroethane (107-06-2) U 1.0 " " 1,1,1-Trichloroethane (71-55-6) U 1.0 " " Cyclohexane (110-82-7) U 1.0 " " Carbon tetrachloride (56-23-5) U 1.0 " " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " " Methylcyclohexane (108-	Carbon disulfide (75-15-0)	U		1.0	"	"	"
Methylene chloride (75-09-2) Methyl acetate (79-20-9) U 1.0 1.0 1.0 1.0 1.0 1.0 1.0	1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Methyl acetate (79-20-9) Methyl acetate (79-20-9) U 1.0 1.0 " " cis-1,2-Dichloroethene (156-60-5) U 1.0 Methyl tert-butyl ether (1634-04-4) U 1.0 1.0 " " 1,1-Dichloroethane (75-34-3) U 1.0 " 1.0 " " 1.1-Dichloroethane (75-34-3) U 1.0 " " " Chloroform (67-66-3) U 1.0 " 1.0 " " 1.1,1-Trichloroethane (107-06-2) U 1.0 " 1.0 " " 1.1,1-Trichloroethane (71-55-6) U 1.0 " Cyclohexane (110-82-7) U 1.0 " Carbon tetrachloride (56-23-5) U 1.0 " Carbon tetrachloride (56-23-5) U 1.0 " Trichloroethene (79-01-6) U 1.0 " Methylcyclohexane (108-87-2) U 1.0 " " Methylcyclohexane (108-87-2) U 1.0 " " " " " Methylcyclohexane (108-87-5) U 1.0 " " " " " " " " " " " " "	Acetone (67-64-1)	8.2	FB, J	5.0	"	"	"
trans-1,2-Dichloroethene (156-60-5) U cis-1,2-Dichloroethene (156-59-2) U Methyl tert-butyl ether (1634-04-4) U 1,0 U 1,	Methylene chloride (75-09-2)	U		2.0	"	"	"
cis-1,2-Dichloroethene (156-59-2) U 1.0 " " Methyl tert-butyl ether (1634-04-4) U 1.0 " " 1,1-Dichloroethane (75-34-3) U 1.0 " " 2-Butanone (78-93-3) U 5.0 " " Chloroform (67-66-3) U 1.0 " " 1,2-Dichloroethane (107-06-2) U 1.0 " " 1,1,1-Trichloroethane (71-55-6) U 1.0 " " Cyclohexane (110-82-7) U 1.0 " " Carbon tetrachloride (56-23-5) U 1.0 " " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " " Methylcyclohexane (108-87-2) U 1.0 " " 1,2-Dichloropropane (78-87-5) U 1.0 " "	Methyl acetate (79-20-9)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4) 1,1-Dichloroethane (75-34-3) 2-Butanone (78-93-3) Chloroform (67-66-3) U 1,0 " " Chloroform (67-66-3) U 1,0 " " 1,1-Trichloroethane (107-06-2) U 1,0 " " " Cyclohexane (110-82-7) Cyclohexane (110-82-7) Carbon tetrachloride (56-23-5) U 1,0 " " " Carbon tetrachloride (79-01-6) W Methylcyclohexane (108-87-2) U 1,0 " " " " " " " " " " " " "	trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3) U 1.0 1.0 " " 2-Butanone (78-93-3) U 5.0 " " " Chloroform (67-66-3) U 1.0 " 1,2-Dichloroethane (107-06-2) U 1.0 " " " " Cyclohexane (110-82-7) U 1.0 Carbon tetrachloride (56-23-5) U 1.0 Benzene (71-43-2) U 1.0 " " " Trichloroethene (79-01-6) U 1.0 " " Methylcyclohexane (108-87-2) U 1.0 " " " " " " " " " " " " " " " " " "	cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
2-Butanone (78-93-3) U 5.0 " " " Chloroform (67-66-3) U 1,2-Dichloroethane (107-06-2) U 1,1,1-Trichloroethane (71-55-6) U 1,0 " " Cyclohexane (110-82-7) Carbon tetrachloride (56-23-5) U 1.0 " Benzene (71-43-2) Trichloroethene (79-01-6) W Methylcyclohexane (108-87-2) U 1,0 " " " " " " " " " " " " " " " " " "	Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
Chloroform (67-66-3) U 1,2-Dichloroethane (107-06-2) U 1,1,1-Trichloroethane (71-55-6) U Cyclohexane (110-82-7) Carbon tetrachloride (56-23-5) Benzene (71-43-2) Trichloroethene (79-01-6) Methylcyclohexane (108-87-2) U 1,2-Dichloropropane (78-87-5) U 1,0 " " " " " " " " " " " " "	1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2) 1,1,1-Trichloroethane (71-55-6) U 1,0 " " Cyclohexane (110-82-7) U 1.0 U 1.0 " " Carbon tetrachloride (56-23-5) U 1.0 U 1.0 " " " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " " " Methylcyclohexane (108-87-2) U 1.0 " " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " " " " " " " " " " " " " " " " "	2-Butanone (78-93-3)	U		5.0	"	"	"
1,1,1-Trichloroethane (71-55-6) U 1.0 " " Cyclohexane (110-82-7) U 1.0 " " Carbon tetrachloride (56-23-5) U 1.0 " " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " " Methylcyclohexane (108-87-2) U 1.0 " " 1,2-Dichloropropane (78-87-5) U 1.0 " "	Chloroform (67-66-3)	U		1.0	"	"	"
Cyclohexane (110-82-7) U 1.0 " " Carbon tetrachloride (56-23-5) U 1.0 " " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " " Methylcyclohexane (108-87-2) U 1.0 " " 1,2-Dichloropropane (78-87-5) U 1.0 " "	1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5) U 1.0 " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " Methylcyclohexane (108-87-2) U 1.0 " " " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " " " "	1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Carbon tetractionide (36-23-3) U 1.0 " " Benzene (71-43-2) U 1.0 " " Trichloroethene (79-01-6) U 1.0 " " Methylcyclohexane (108-87-2) U 1.0 " " 1,2-Dichloropropane (78-87-5) U 1.0 " "	Cyclohexane (110-82-7)	U		1.0	"	"	"
Trichloroethene (79-01-6) Methylcyclohexane (108-87-2) U 1.0 " " 1,2-Dichloropropane (78-87-5) U 1.0 " " " "	Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Methylcyclohexane (108-87-2) U 1.0 " 1,2-Dichloropropane (78-87-5) U 1.0 " " "	Benzene (71-43-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5) U 1.0 "" ""	Trichloroethene (79-01-6)	U		1.0	"	"	"
1,2-Dicinioropropane (78-87-3)	Methylcyclohexane (108-87-2)	U		1.0	"	"	"
Durand dishlaramentary (75, 27, 4)	1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodicnioromethane (73-27-4) U 1.0	Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 56 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-03 Station ID: GW-08

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

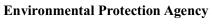
Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609031-03 **Station ID: GW-08**

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	3.03		0.120	1	2	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 58 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-08 Lab ID: 1609031-03

Batch: B6J0412 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609031-04

Batch: B6I2712 Sample Type: Liquid Date Collected: 09/22/16 Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-08-D

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	29.2		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	42,000		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	28.1		20.0	"	"	"
Iron (7439-89-6)	U		25.0	"	"	"
Magnesium (7439-95-4)	16,100		150	"	"	"
Manganese (7439-96-5)	U		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	10,300		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	10,500		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-08-D Lab ID: 1609031-04

Batch: B6I2713 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-08-D Lab ID: 1609031-04

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.229ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Report Name: Project #: 16SF126

Page 62 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-04 Station ID: GW-08-D

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result μg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	49.1		98.1	86-117	09/27/16	09/27/16
Toluene-d8	49.6		99.3	85-113	"	"
4-Bromofluorobenzene	41.7		83.4	73-115	"	"

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.7	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	11.7	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	n
Methylcyclohexane (108-87-2)	U		1.0	"	"	n
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-04 Station ID: GW-08-D

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609031-04 Station ID: GW-08-D

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Vol: 10ml; Final Vol: 10ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	3.11		0.120	1	2	09/29/16	09/29/16

Project #: 16SF126 Report Name:

Page 65 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-08-D Lab ID: 1609031-04

Batch: B6J0412 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-09 Lab ID: 1609031-05

Batch: B6I2714 Date Collected: 09/21/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.361ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Report Name: Project #: 16SF126

Page 67 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-05 Station ID: GW-09

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	50.8		102	86-117	09/27/16	09/27/16
Toluene-d8	50.9		102	85-113	"	"
4-Bromofluorobenzene	42.7		85.4	73-115	"	"

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.9	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	5.6	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-05 Station ID: GW-09

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.

Environmental Protection Agency Region 6 Laboratory



10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609031-06

Batch: B6I2712 Sample Type: Liquid

Date Collected: 09/22/16 Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-10

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	489		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	32,400		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	12,700		25.0	"	"	"
Magnesium (7439-95-4)	27,600		150	"	"	"
Manganese (7439-96-5)	2,400		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	U		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	92,200		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	41.8		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-10 Lab ID: 1609031-06

Batch: B6I2713 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	29.0		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-10 Lab ID: 1609031-06

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.336ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-06 Station ID: GW-10

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result μg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	52.2		104	86-117	09/27/16	09/27/16
Toluene-d8	48.4		96.9	85-113	"	"
4-Bromofluorobenzene	48.6		97.3	73-115	"	"

Targets

Analyte (CAS Number)	Result	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzad
	μg/L	Qualificis				Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"		
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	2.0	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	180	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	6.1		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	50.7		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-06 Station ID: GW-10

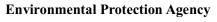
Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	3.0		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2. Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609031-06 **Station ID: GW-10**

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	U		0.060	1	1	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 75 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-10 Lab ID: 1609031-06

Batch: B6J0412 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 25ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Report Name: Project #: 16SF126

Page 76 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609031-07

Batch: B6I2712

Sample Type: Liquid

Date Collected: 09/22/16 Sample Vol: 50ml

Sample Qualifiers:

Station ID: GW-10-D

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	μg/L	Qualifiers	Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	482		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	32,100		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	12,500		25.0	"	"	"
Magnesium (7439-95-4)	27,200		150	"	"	"
Manganese (7439-96-5)	2,370		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	U		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	91,100		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	40.8		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-10-D Lab ID: 1609031-07

Batch: B6I2713 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 50ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	29.1		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-10-D Lab ID: 1609031-07

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.228ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	"

Report Name: Project #: 16SF126

Page 79 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-07 Station ID: GW-10-D

Batch: B6I2805 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	51.6		103	86-117	09/27/16	09/27/16
Toluene-d8	53.7		107	85-113	"	"
4-Bromofluorobenzene	49.4		98.8	73-115	"	"

Targets

Analyte (CAS Number)	Result	Analyte Qualifiers	Reporting Limit	Dilution	Duaman- 1	A malayara J
	μg/L	Qualifiers			Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.7	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	200	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	6.5		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	56.0		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 80 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-07 Station ID: GW-10-D

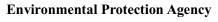
Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	3.1		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2. Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Station ID: GW-10-D Lab ID: 1609031-07

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	U		0.060	1	1	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 82 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-10-D Lab ID: 1609031-07

Batch: B6J0412 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Report Name: Project #: 16SF126

Page 83 of 129

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-12 Lab ID: 1609031-08

Batch: B6I2714 Date Collected: 09/21/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 36.852ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Report Name: Project #: 16SF126

Page 84 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-08 Station ID: GW-12

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	53.6		107	86-117	09/27/16	09/27/16
Toluene-d8	54.1		108	85-113	"	"
4-Bromofluorobenzene	45.0		90.0	73-115	"	"
		TD				

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Drangrad	Analyzed
Dichlorodifluoromethane (75-71-8)	μg/L 	Qualificis	1.0		09/27/16	09/27/16
· · · ·				1	09/27/16 "	09/2//10
Chloromethane (74-87-3)	U		1.0		"	"
Vinyl chloride (75-01-4)	U	_	1.0	"		"
Bromomethane (74-83-9)	1.7	В	1.0		"	
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	6.5	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 85 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-08 Station ID: GW-12

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Station ID: GW-13-119 Lab ID: 1609031-09

Batch: B6I2712 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 50ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	134		100	1	09/28/16	10/21/16
Barium (7440-39-3)	59.3		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	72,300		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	234		25.0	"	"	"
Magnesium (7439-95-4)	28,700		150	"	"	"
Manganese (7439-96-5)	5.5		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,810		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	29,500		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-13-119 Lab ID: 1609031-09

Batch: B6I2713 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 50ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-13-119 Lab ID: 1609031-09

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 37.202ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	"

Report Name: Project #: 16SF126

Page 89 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Station ID: GW-13-119 Lab ID: 1609031-09

Batch: B6I2805 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result μg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	46.8		93.6	86-117	09/27/16	09/27/16
Toluene-d8	50.7		101	85-113	"	"
4-Bromofluorobenzene	44.0		87.9	73-115	"	"

Targets

	Result	Analyte	Reporting			
Analyte (CAS Number)	$\mu g/L$	Qualifiers	Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.0	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	8.6	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	n
Methylcyclohexane (108-87-2)	U		1.0	"	"	n
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	n
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-09 Station ID: GW-13-119

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

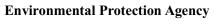
Targets (Continued)

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	5.9		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	**	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.

Project #: 16SF126





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Station ID: GW-13-119 Lab ID: 1609031-09

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	1.45		0.120	1	2	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 92 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-13-119 Lab ID: 1609031-09

Batch: B6J0412 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 25ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP

Lab ID: 1609031-10

Batch: B6I2712 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 50ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Aluminum (7429-90-5)	U		100	1	09/28/16	10/21/16
Barium (7440-39-3)	69.1		10.0	"	"	"
Beryllium (7440-41-7)	U		5.0	"	"	"
Cadmium (7440-43-9)	U		5.0	"	"	"
Calcium (7440-70-2)	20,100		150	"	"	"
Chromium (7440-47-3)	U		10.0	"	"	"
Cobalt (7440-48-4)	U		20.0	"	"	"
Copper (7440-50-8)	U		20.0	"	"	"
Iron (7439-89-6)	67.6		25.0	"	"	"
Magnesium (7439-95-4)	8,480		150	"	"	"
Manganese (7439-96-5)	17.0		5.0	"	"	"
Nickel (7440-02-2)	U		20.0	"	"	"
Potassium (7440-09-7)	1,340		1,000	"	"	"
Silver (7440-22-4)	U		10.0	"	"	"
Sodium (7440-23-5)	17,800		500	"	"	"
Vanadium (7440-62-2)	U		20.0	"	"	"
Zinc (7440-66-6)	U		20.0	"	"	"

Report Name: Project #: 16SF126

Station ID: GW-14

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS

Station ID: GW-14 Lab ID: 1609031-10

Batch: B6I2713 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 50ml

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Antimony (7440-36-0)	U		2.0	4	09/28/16	10/07/16
Arsenic (7440-38-2)	U		2.0	"	"	"
Lead (7439-92-1)	U		2.0	"	"	"
Selenium (7782-49-2)	U		4.0	"	"	"
Thallium (7440-28-0)	U		2.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-14 Lab ID: 1609031-10

Batch: B6I2714 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 37.336ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	"

Report Name: Project #: 16SF126

Page 96 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-10 Station ID: GW-14

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid

Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	49.3		98.7	86-117	09/27/16	09/27/16
Toluene-d8	52.2		104	85-113	"	"
4-Bromofluorobenzene	45.7		91.5	73-115	"	"

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	U		1.0	1	09/27/16	09/27/16
Chloromethane (74-87-3)	U		1.0	"	"	"
Vinyl chloride (75-01-4)	U		1.0	"	"	"
Bromomethane (74-83-9)	1.2	В	1.0	"	"	"
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	U		5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"

Report Name: Project #: 16SF126

Page 97 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-10 Station ID: GW-14

Batch: B6I2805 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609031-10 Station ID: GW-14

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 10ml; Final Vol: 10ml

Targets

Analyte (CAS Number)	Result µg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	2.95		0.120	1	2	09/29/16	09/29/16

Report Name: Project #: 16SF126

Page 99 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS

Station ID: GW-14 Lab ID: 1609031-10

Batch: B6J0412 Date Collected: 09/22/16 Sample Type: Liquid Sample Vol: 25ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Mercury (7439-97-6)	U		0.200	1	10/04/16	10/05/16

Report Name: Project #: 16SF126

Page 100 of 129

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: GW-17 Lab ID: 1609031-11

Batch: B6I2714 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 37.369ml

Sample Qualifiers:

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-11 Station ID: GW-17

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	49.7		99.4	86-117	09/27/16	09/27/16
Toluene-d8	51.6		103	85-113	"	"
4-Bromofluorobenzene	42.9		85.7	73-115	"	"

Targets

Dichlorodifluoromethane (75-71-8) Chloromethane (74-87-3) Vinyl chloride (75-01-4) Bromomethane (74-83-9) Chloroethane (75-00-3) Trichlorofluoromethane (75-69-4)	U U U		1.0	1		
Vinyl chloride (75-01-4) Bromomethane (74-83-9) Chloroethane (75-00-3)				1	09/27/16	09/27/16
Bromomethane (74-83-9) Chloroethane (75-00-3)	U		1.0	"	"	"
Chloroethane (75-00-3)			1.0	"	"	"
	1.7	В	1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	5.8	FB, J	5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-11 Station ID: GW-17

Batch: B6I2805 Date Collected: 09/21/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Station ID: TB-160920-1 Lab ID: 1609031-12

Batch: B6I2805 Date Collected: 09/20/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 5ml

Surrogates

Analyte	Result µg/L	Analyte Qualifiers	%Recovery	%Recovery Limits	Prepared	Analyzed
1,2-Dichloroethane-d4	55.2		110	86-117	09/27/16	09/27/16
Toluene-d8	54.8		110	85-113	"	"
4-Bromofluorobenzene	47.6		95.2	73-115	"	"

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
Dichlorodifluoromethane (75-71-8)	μg/L U	Qualificis	1.0			09/27/16
, , ,				1	09/27/16	09/2//10
Chloromethane (74-87-3)	U		1.0		"	"
Vinyl chloride (75-01-4)	U	_	1.0	"		"
Bromomethane (74-83-9)	1.6	В	1.0		"	
Chloroethane (75-00-3)	U		1.0	"	"	"
Trichlorofluoromethane (75-69-4)	U		1.0	"	"	"
1,1-Dichloroethene (75-35-4)	U		1.0	"	"	"
Carbon disulfide (75-15-0)	U		1.0	"	"	"
1,1,2-Trichloro-1,2,2-trifluoroethane (76-13-1)	U		1.0	"	"	"
Acetone (67-64-1)	U		5.0	"	"	"
Methylene chloride (75-09-2)	U		2.0	"	"	"
Methyl acetate (79-20-9)	U		1.0	"	"	"
trans-1,2-Dichloroethene (156-60-5)	U		1.0	"	"	"
cis-1,2-Dichloroethene (156-59-2)	U		1.0	"	"	"
Methyl tert-butyl ether (1634-04-4)	U		1.0	"	"	"
1,1-Dichloroethane (75-34-3)	U		1.0	"	"	"
2-Butanone (78-93-3)	U		5.0	"	"	"
Chloroform (67-66-3)	U		1.0	"	"	"
1,2-Dichloroethane (107-06-2)	U		1.0	"	"	"
1,1,1-Trichloroethane (71-55-6)	U		1.0	"	"	"
Cyclohexane (110-82-7)	U		1.0	"	"	"
Carbon tetrachloride (56-23-5)	U		1.0	"	"	"
Benzene (71-43-2)	U		1.0	"	"	"
Trichloroethene (79-01-6)	U		1.0	"	"	"
Methylcyclohexane (108-87-2)	U		1.0	"	"	"
1,2-Dichloropropane (78-87-5)	U		1.0	"	"	"
Bromodichloromethane (75-27-4)	U		1.0	"	"	"



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level)

Lab ID: 1609031-12 Station ID: TB-160920-1

Batch: B6I2805 Date Collected: 09/20/16 Sample Type: Liquid Sample Vol: 5ml

Sample Qualifiers:

Targets (Continued)

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
cis-1,3-Dichloropropene (10061-01-5)	U		1.0	1	09/27/16	09/27/16
trans-1,3-Dichloropropene (10061-02-6)	U		1.0	"	"	"
1,1,2-Trichloroethane (79-00-5)	U		1.0	"	"	"
Dibromochloromethane (124-48-1)	U		1.0	"	"	"
Bromoform (75-25-2)	U		1.0	"	"	"
4-Methyl-2-pentanone (108-10-1)	U		5.0	"	"	"
Toluene (108-88-3)	U		1.0	"	"	"
Tetrachloroethene (127-18-4)	U		1.0	"	"	"
2-Hexanone (591-78-6)	U		5.0	"	"	"
1,2-Dibromoethane (106-93-4)	U		1.0	"	"	"
Chlorobenzene (108-90-7)	U		1.0	"	"	"
Ethylbenzene (100-41-4)	U		1.0	"	"	"
meta-/para-Xylene (na)	U		2.0	"	"	"
ortho-Xylene (95-47-6)	U		1.0	"	"	"
Styrene (100-42-5)	U		1.0	"	"	"
Isopropylbenzene (98-82-8)	U		1.0	"	"	"
1,1,2,2-Tetrachloroethane (79-34-5)	U		1.0	"	"	"
1,3-Dichlorobenzene (541-73-1)	U		1.0	"	"	"
1,4-Dichlorobenzene (106-46-7)	U		1.0	"	"	"
1,2-Dichlorobenzene (95-50-1)	U		1.0	"	"	"
1,2-Dibromo-3-chloropropane (96-12-8)	U		1.0	"	"	"
1,2,4-Trichlorobenzene (120-82-1)	U		1.0	"	"	"

This sample was received at pH 2.

Vinyl Chloride and Styrene may be biased low.

Report Name: Project #: 16SF126 Page 105 of 129

Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD

Station ID: TB-160922-1 Lab ID: 1609031-13

Batch: B6I2714 Date Collected: 09/22/16

Sample Type: Liquid Sample Qualifiers: Sample Vol: 36.685ml

Targets

Analyte (CAS Number)	Result ug/L	Analyte Qualifiers	Reporting Limit	Dilution	Prepared	Analyzed
1,2-Dibromo-3-chloropropane (96-12-8)	U		0.019	1	09/28/16	09/28/16
1,2-Dibromoethane (106-93-4)	U		0.019	"	"	**

Report Name: Project #: 16SF126

Page 106 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC

Lab ID: 1609031-14 Station ID: GW-09-Cr6

Batch: B6J0411 Date Collected: 09/22/16

Sample Type: Liquid Sample Vol: 10ml; Final Vol: 10ml Sample Qualifiers:

Targets

Analyte (CAS Number)	Result μg/L	Analyte Qualifiers	Reporting Limit	Prep Dil	Anal Dil	Prepared	Analyzed
Hexavalent Chromium (1854-02-99)	3.22		0.120	1	2	09/29/16	09/29/16

Project #: 16SF126 Report Name:

Page 107 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level) - Quality Control

Batch: B6I2805 Sample Type: Liquid

Blank (B6I2805-BLK1)

Prepared: 9/27/2016 Analyzed: 9/27/2016

Surrogates

ANALYTE	Result μg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	49.4		50.0	98.8	86-117
Toluene-d8	48.4		50.0	96.9	85-113
4-Bromofluorobenzene	42.2		50.0	84.3	73-115

Blank (B6I2805-BLK1)

Prepared: 9/27/2016 Analyzed: 9/27/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit
Dichlorodifluoromethane	U	1.0
Chloromethane	U	1.0
Vinyl chloride	U	1.0
Bromomethane	1.6	1.0
Chloroethane	U	1.0
Trichlorofluoromethane	U	1.0
1,1-Dichloroethene	U	1.0
Carbon disulfide	U	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	U	1.0
Acetone	U	5.0
Methylene chloride	U	2.0
Methyl acetate	U	1.0
trans-1,2-Dichloroethene	U	1.0
cis-1,2-Dichloroethene	U	1.0
Methyl tert-butyl ether	U	1.0
1,1-Dichloroethane	U	1.0
2-Butanone	U	5.0
Chloroform	U	1.0
1,2-Dichloroethane	U	1.0
1,1,1-Trichloroethane	U	1.0
Cyclohexane	U	1.0
Carbon tetrachloride	U	1.0
Benzene	U	1.0



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level) - Quality Control

Batch: B6I2805 Sample Type: Liquid

Blank (B6I2805-BLK1)

Prepared: 9/27/2016 Analyzed: 9/27/2016

Targets (Continued)

	Result	Analyte Reporting
ANALYTE	μg/L	Qualifiers Limit
Trichloroethene	U	1.0
Methylcyclohexane	U	1.0
1,2-Dichloropropane	U	1.0
Bromodichloromethane	U	1.0
cis-1,3-Dichloropropene	U	1.0
trans-1,3-Dichloropropene	U	1.0
1,1,2-Trichloroethane	U	1.0
Dibromochloromethane	U	1.0
Bromoform	U	1.0
4-Methyl-2-pentanone	U	5.0
Toluene	U	1.0
Tetrachloroethene	U	1.0
2-Hexanone	U	5.0
1,2-Dibromoethane	U	1.0
Chlorobenzene	U	1.0
Ethylbenzene	U	1.0
meta-/para-Xylene	U	2.0
ortho-Xylene	U	1.0
Styrene	U	1.0
Isopropylbenzene	U	1.0
1,1,2,2-Tetrachloroethane	U	1.0
1,3-Dichlorobenzene	U	1.0
1,4-Dichlorobenzene	U	1.0
1,2-Dichlorobenzene	U	1.0
1,2-Dibromo-3-chloropropane	U	1.0
1,2,4-Trichlorobenzene	U	1.0



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level) - Quality Control

Batch: B6I2805 Sample Type: Liquid

LCS (B6I2805-BS1)

Prepared: 9/27/2016 Analyzed: 9/27/2016

Surrogates

ANALYTE	Result μg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	53.3		50.0	107	86-117
Toluene-d8	53.6		50.0	107	85-113
4-Bromofluorobenzene	53.8		50.0	108	73-115

LCS (B6I2805-BS1)

Prepared: 9/27/2016 Analyzed: 9/27/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	Spike Level	%REC %REC Limits
Dichlorodifluoromethane	46.0	1.0	50.0	92.1 69-132
Chloromethane	50.4	1.0	50.0	101 73-130
Vinyl chloride	51.4	1.0	50.0	103 76-130
Bromomethane	59.9	1.0	50.0	120 75-129
Chloroethane	66.0	1.0	50.0	132 # 75-121
Trichlorofluoromethane	56.5	1.0	50.0	113 79-130
1,1-Dichloroethene	53.9	1.0	50.0	108 76-127
Carbon disulfide	60.0	1.0	50.0	120 74-122
1,1,2-Trichloro-1,2,2-trifluoroethane	55.2	1.0	50.0	110 79-126
Acetone	66.5	5.0	50.0	133 44-140
Methylene chloride	54.1	2.0	50.0	108 79-122
Methyl acetate	52.2	1.0	50.0	104 78-118
trans-1,2-Dichloroethene	54.0	1.0	50.0	108 78-123
cis-1,2-Dichloroethene	53.2	1.0	50.0	106 80-120
Methyl tert-butyl ether	52.6	1.0	50.0	105 78-124
1,1-Dichloroethane	55.7	1.0	50.0	111 80-122
2-Butanone	58.8	5.0	50.0	118 71-127
Chloroform	52.3	1.0	50.0	105 81-121
1,2-Dichloroethane	54.3	1.0	50.0	109 80-121
1,1,1-Trichloroethane	54.8	1.0	50.0	110 80-120
Cyclohexane	51.6	1.0	50.0	103 77-120
Carbon tetrachloride	53.2	1.0	50.0	106 78-121
Benzene	53.3	1.0	50.0	107 81-119



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level) - Quality Control

Batch: B6I2805 Sample Type: Liquid

LCS (B6I2805-BS1)

Prepared: 9/27/2016 Analyzed: 9/27/2016

Targets (Continued)

	Result	Analyte D	C :1	%RE	ec.
ANALYTE		Analyte Reporting Qualifiers Limit	Spike		
	μg/L		Level		
Trichloroethene	54.1	1.0	50.0	108 80-1	20
Methylcyclohexane	52.5	1.0	50.0	105 79-1	22
1,2-Dichloropropane	55.9	1.0	50.0	112 81-1	21
Bromodichloromethane	52.4	1.0	50.0	105 80-1	21
cis-1,3-Dichloropropene	53.9	1.0	50.0	108 79-1	19
trans-1,3-Dichloropropene	51.2	1.0	50.0	102 78-1	19
1,1,2-Trichloroethane	51.7	1.0	50.0	103 80-1	20
Dibromochloromethane	52.0	1.0	50.0	104 80-1	18
Bromoform	49.7	1.0	50.0	99.4 79-1	19
4-Methyl-2-pentanone	49.1	5.0	50.0	98.2 77-1	21
Toluene	53.8	1.0	50.0	108 81-1	18
Tetrachloroethene	53.9	1.0	50.0	108 80-1	20
2-Hexanone	52.8	5.0	50.0	106 77-1	22
1,2-Dibromoethane	53.0	1.0	50.0	106 81-1	18
Chlorobenzene	53.6	1.0	50.0	107 81-1	18
Ethylbenzene	53.4	1.0	50.0	107 80-1	18
meta-/para-Xylene	108	2.0	100	108 81-1	17
ortho-Xylene	52.2	1.0	50.0	104 81-1	18
Styrene	51.9	1.0	50.0	104 79-1	18
Isopropylbenzene	52.0	1.0	50.0	104 74-1	24
1,1,2,2-Tetrachloroethane	48.6	1.0	50.0	97.2 79-1	19
1,3-Dichlorobenzene	52.0	1.0	50.0	104 81-1	18
1,4-Dichlorobenzene	51.4	1.0	50.0	103 80-1	17
1,2-Dichlorobenzene	52.5	1.0	50.0	105 79-1	19
1,2-Dibromo-3-chloropropane	48.6	1.0	50.0	97.1 77-1	23
1,2,4-Trichlorobenzene	51.9	1.0	50.0	104 78-1	28



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level) - Quality Control

Batch: B612805 Sample Type: Liquid

Matrix Spike (B6I2805-MS1)

Source: 1609020-02 Prepared: 9/27/2016 Analyzed: 9/27/2016

Surrogates

ANALYTE	Result μg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	53.2		50.0	106	86-117
Toluene-d8	51.3		50.0	103	85-113
4-Bromofluorobenzene	45.4		50.0	90.9	73-115

Matrix Spike (B6I2805-MS1)

Source: 1609020-02 Prepared: 9/27/2016 Analyzed: 9/27/2016

Targets

ANALYTE	Result µg/L	Analyte Rep Qualifiers I	porting Limit		Source Result	%REC	%REC Limits
1,1-Dichloroethene	47.7		1.0	50.0		95.4	72-134
Benzene	48.5		1.0	50.0		97.0	79-122
Trichloroethene	51.5		1.0	50.0		103	79-126
Toluene	52.5		1.0	50.0		105	81-122
Chlorobenzene	50.4		1.0	50.0		101	82-121

Project #: 16SF126

Report Name:



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Volatiles by CLP OLM04.2 - GC/MS (Low Level) - Quality Control

Batch: B612805 Sample Type: Liquid

Matrix Spike Dup (B6I2805-MSD1)

Source: 1609020-02 Prepared: 9/27/2016 Analyzed: 9/27/2016

Surrogates

ANALYTE	Result μg/L	Analyte Qualifier	Spike Level	%REC	%REC Limits
1,2-Dichloroethane-d4	54.8		50.0	110	86-117
Toluene-d8	53.0		50.0	106	85-113
4-Bromofluorobenzene	46.1		50.0	92.3	73-115

Matrix Spike Dup (B6I2805-MSD1)

Source: 1609020-02 Prepared: 9/27/2016 Analyzed: 9/27/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
1,1-Dichloroethene	51.4	1.0	50.0		103	72-134	7.43	21
Benzene	53.1	1.0	50.0		106	79-122	8.94	16
Trichloroethene	52.8	1.0	50.0		106	79-126	2.57	14
Toluene	54.9	1.0	50.0		110	81-122	4.49	13
Chlorobenzene	53.8	1.0	50.0		108	82-121	6.45	10

Project #: 16SF126 Report Name:



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD - Quality Control

Batch: B6I2714 Sample Type: Liquid

Blank (B6I2714-BLK1)

Prepared: 9/28/2016 Analyzed: 9/28/2016

Targets

ANALYTE	Result ug/L	Analyte Reporting Qualifiers Limit	
1,2-Dibromo-3-chloropropane	U	0.020	
1,2-Dibromoethane	IJ	0.020	

LCS (B6I2714-BS1)

Prepared: 9/28/2016 Analyzed: 9/28/2016

Targets

ANALYTE	Result ug/L	Analyte Reportin Qualifiers Limit		%REC	%REC Limits
1,2-Dibromo-3-chloropropane	0.225	0.020	0.250	90.1	60-140
1,2-Dibromoethane	0.251	0.020	0.250	100	60-140

LCS Dup (B6I2714-BSD1)

Prepared: 9/28/2016 Analyzed: 9/28/2016

Targets

ANALYTE	Result ug/L	Analyte Reporting Qualifiers Limit	Spike Level	%REC	%REC Limits	RPD	RPD Limit
1,2-Dibromo-3-chloropropane	0.244	0.020	0.250	97.8	60-140	8.20	30
1,2-Dibromoethane	0.254	0.020	0.250	102	60-140	1.38	30

Matrix Spike (B6I2714-MS1)

Source: 1609020-02 Prepared: 9/28/2016 Analyzed: 9/28/2016

Targets

ANALYTE	Result ug/L	Analyte Reporting Qualifiers Limit			%REC Limits
1,2-Dibromo-3-chloropropane	0.224	0.019	0.237	94.6	60-140
1,2-Dibromoethane	0.232	0.019	0.237	97.7	60-140



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

EDB/DBCP by Method 8011 - GC/ECD - Quality Control

Batch: B6I2714 Sample Type: Liquid

Matrix Spike Dup (B6I2714-MSD1)

Prepared: 9/28/2016 Analyzed: 9/28/2016 Source: 1609020-02

Targets

ANALYTE	Result ug/L	Analyte Reporting Qualifiers Limit			%REC Limits	RPD	RPD Limit
1,2-Dibromo-3-chloropropane	0.200	0.019	0.238	84.2	60-140	11.3	30
1,2-Dibromoethane	0.225	0.019	0.238	94.6	60-140	2.90	30



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Hexavalent Chromium by Modified EPA Method 218.7 - IC - Quality Control

Batch: B6J0411 Sample Type: Liquid

Blank (B6J0411-BLK1)

Prepared: 9/29/2016 Analyzed: 9/29/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	
Hexavalent Chromium	U	0.060	

Matrix Spike (B6J0411-MS1)

Prepared: 9/29/2016 Analyzed: 9/29/2016 Source: 1609031-09

Targets

ANALYTE		Analyte Repo Qualifiers Lin			%REC	%REC Limits
Hexavalent Chromium	5.73		5.00	0.724	100	85-115

Matrix Spike Dup (B6J0411-MSD1)

Prepared: 9/29/2016 Analyzed: 9/29/2016 Source: 1609031-09

Targets

ANALYTE	Result μg/L	Analyte Re Qualifiers				%REC Limits	RPD	RPD Limit
Hexavalent Chromium	5.76		5.00	0.724	101	85-115	0.56	15



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP - Quality Control

Sample Type: Liquid **Batch: B6I2712**

Blank (B6I2712-BLK1)

Prepared: 9/28/2016 Analyzed: 10/21/2016

Targets

		Taigets
ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit
Aluminum	U	100
Barium	U	10.0
Beryllium	U	5.0
Cadmium	U	5.0
Calcium	U	150
Chromium	U	10.0
Cobalt	U	20.0
Copper	U	20.0
Iron	U	25.0
Magnesium	U	150
Manganese	U	5.0
Nickel	U	20.0
Potassium	U	1,000
Silver	U	10.0
Sodium	U	500
Vanadium	U	20.0
Zinc	U	20.0

LCS (B6I2712-BS1)

Prepared: 9/28/2016 Analyzed: 10/21/2016

Targets

ANALYTE	Result μg/L	porting Limit	Spike Level	%REC	%REC Limits	
Aluminum	927	100	1,000	92.7	75-125	
Barium	1,810	10.0	2,000	90.4	75-125	
Beryllium	47.7	5.0	50.0	95.3	75-125	
Cadmium	47.4	5.0	50.0	94.8	75-125	
Calcium	89,600	150	100,000	89.6	75-125	
Chromium	367	10.0	400	91.8	75-125	
Cobalt	181	20.0	200	90.7	75-125	
Copper	371	20.0	400	92.8	75-125	
Iron	914	25.0	1,000	91.4	75-125	



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP - Quality Control

Sample Type: Liquid **Batch: B6I2712**

LCS (B6I2712-BS1)

Prepared: 9/28/2016 Analyzed: 10/21/2016

Targets (Continued)

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	Spike Level	%REC %REC Limits
Magnesium	92,100	150	100,000	92.1 75-125
Manganese	361	5.0	400	90.1 75-125
Nickel	349	20.0	400	87.4 75-125
Potassium	93,400	1,000	100,000	93.4 75-125
Silver	47.1	10.0	50.0	94.2 75-125
Sodium	92,200	500	100,000	92.2 75-125
Vanadium	384	20.0	400	95.9 75-125
Zinc	900	20.0	1,000	90.0 75-125

Matrix Spike (B6I2712-MS1)

Prepared: 9/28/2016 Analyzed: 10/21/2016 Source: 1609020-02

Targets

ANALYTE	Result μg/L	Analyte R Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Aluminum	880		100	1,000	3.6	87.6	75-125
Barium	1,740		10.0	2,000	22.2	86.0	75-125
Beryllium	45.5		5.0	50.0	1.2	88.7	75-125
Cadmium	44.9		5.0	50.0	0.8	88.1	75-125
Calcium	123,000		150	100,000	42,200	81.3	75-125
Chromium	350		10.0	400	2.7	86.9	75-125
Cobalt	172		20.0	200	4.8	83.7	75-125
Copper	379		20.0	400	11.2	92.0	75-125
Iron	884		25.0	1,000	20.1	86.4	75-125
Magnesium	103,000		150	100,000	16,600	86.5	75-125
Manganese	343		5.0	400	1.7	85.3	75-125
Nickel	332		20.0	400	5.4	81.6	75-125
Potassium	90,800		1,000	100,000	1,060	89.8	75-125
Silver	45.6		10.0	50.0	4.1	83.0	75-125
Sodium	125,000		500	100,000	39,100	86.3	75-125
Vanadium	367		20.0	400	6.9	90.0	75-125
Zinc	868		20.0	1,000	8.5	86.0	75-125



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP - Quality Control

Sample Type: Liquid **Batch: B6I2712**

Matrix Spike (B6I2712-MS2)

Prepared: 9/28/2016 Analyzed: 10/21/2016 Source: 1609031-10

Targets

			0				
ANALYTE	Result μg/L	Analyte p Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits
Aluminum	973		100	1,000	51.1	92.2	75-125
Barium	1,850		10.0	2,000	69.1	89.0	75-125
Beryllium	47.0		5.0	50.0	1.3	91.4	75-125
Cadmium	46.5		5.0	50.0	0.9	91.3	75-125
Calcium	108,000		150	100,000	20,100	88.0	75-125
Chromium	366		10.0	400	6.6	89.9	75-125
Cobalt	178		20.0	200	5.1	86.3	75-125
Copper	370		20.0	400	6.2	91.1	75-125
Iron	953		25.0	1,000	67.6	88.6	75-125
Magnesium	99,700		150	100,000	8,480	91.3	75-125
Manganese	370		5.0	400	17.0	88.2	75-125
Nickel	344		20.0	400	5.9	84.6	75-125
Potassium	94,400		1,000	100,000	1,340	93.1	75-125
Silver	46.6		10.0	50.0	4.5	84.3	75-125
Sodium	110,000		500	100,000	17,800	92.0	75-125
Vanadium	378		20.0	400	5.2	93.3	75-125
Zinc	895		20.0	1,000	12.2	88.2	75-125

Matrix Spike Dup (B6I2712-MSD1)

Source: 1609020-02 Prepared: 9/28/2016 Analyzed: 10/21/2016

Targets

ANALYTE	Result μg/L	Analyte p Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Aluminum	882		100	1,000	3.6	87.8	75-125	0.24	20
Barium	1,730		10.0	2,000	22.2	85.4	75-125	0.60	20
Beryllium	44.8		5.0	50.0	1.2	87.2	75-125	1.65	20
Cadmium	44.3		5.0	50.0	0.8	86.8	75-125	1.43	20
Calcium	123,000		150	100,000	42,200	80.5	75-125	0.59	20
Chromium	347		10.0	400	2.7	86.0	75-125	1.02	20
Cobalt	171		20.0	200	4.8	82.9	75-125	0.93	20
Copper	377		20.0	400	11.2	91.3	75-125	0.71	20
Iron	878		25.0	1,000	20.1	85.8	75-125	0.76	20
Magnesium	102,000		150	100,000	16,600	85.8	75-125	0.69	20

Report Name: Project #: 16SF126

Page 119 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP - Quality Control

Sample Type: Liquid **Batch: B6I2712**

Matrix Spike Dup (B6I2712-MSD1)

Source: 1609020-02 Prepared: 9/28/2016 Analyzed: 10/21/2016

Targets (Continued)

ANALYTE	Result µg/L	Analyte Reporting Qualifiers Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Manganese	341	5.0	400	1.7	84.8	75-125	0.57	20
Nickel	328	20.0	400	5.4	80.7	75-125	1.08	20
Potassium	89,800	1,000	100,000	1,060	88.7	75-125	1.18	20
Silver	45.4	10.0	50.0	4.1	82.6	75-125	0.47	20
Sodium	124,000	500	100,000	39,100	85.3	75-125	0.82	20
Vanadium	364	20.0	400	6.9	89.3	75-125	0.75	20
Zinc	863	20.0	1,000	8.5	85.4	75-125	0.63	20

Matrix Spike Dup (B6I2712-MSD2)

Prepared: 9/28/2016 Analyzed: 10/21/2016 Source: 1609031-10

Targets

ANALYTE	Result μg/L	Analyte Qualifiers	Reporting Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Aluminum	960		100	1,000	51.1	90.9	75-125	1.41	20
Barium	1,820		10.0	2,000	69.1	87.4	75-125	1.79	20
Beryllium	46.5		5.0	50.0	1.3	90.3	75-125	1.18	20
Cadmium	45.5		5.0	50.0	0.9	89.2	75-125	2.27	20
Calcium	107,000		150	100,000	20,100	86.5	75-125	1.41	20
Chromium	356		10.0	400	6.6	87.4	75-125	2.76	20
Cobalt	174		20.0	200	5.1	84.5	75-125	2.04	20
Copper	363		20.0	400	6.2	89.3	75-125	1.96	20
Iron	940		25.0	1,000	67.6	87.3	75-125	1.37	20
Magnesium	98,500		150	100,000	8,480	90.1	75-125	1.20	20
Manganese	363		5.0	400	17.0	86.6	75-125	1.75	20
Nickel	336		20.0	400	5.9	82.6	75-125	2.37	20
Potassium	93,600		1,000	100,000	1,340	92.3	75-125	0.83	20
Silver	45.6		10.0	50.0	4.5	82.2	75-125	2.22	20
Sodium	108,000		500	100,000	17,800	90.6	75-125	1.29	20
Vanadium	373		20.0	400	5.2	92.0	75-125	1.30	20
Zinc	880		20.0	1,000	12.2	86.8	75-125	1.63	20



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS - Quality Control

Batch: B6I2713 Sample Type: Liquid

Blank (B6I2713-BLK1)

Prepared: 9/28/2016 Analyzed: 10/7/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	
Antimony	U	2.0	
Arsenic	U	2.0	
Lead	U	2.0	
Selenium	U	4.0	
Thallium	U	2.0	

LCS (B6I2713-BS1)

Prepared: 9/28/2016 Analyzed: 10/7/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit		%REC %REC Limits
Antimony	192	2.0	200	96.1 85-115
Arsenic	189	2.0	200	94.7 85-115
Lead	192	2.0	200	95.9 85-115
Selenium	188	4.0	200	94.1 85-115
Thallium	191	2.0	200	95.7 85-115

Matrix Spike (B6I2713-MS1)

Prepared: 9/28/2016 Analyzed: 10/7/2016 Source: 1609020-02

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit			%REC	%REC Limits
Antimony	205	2.0	200	0.05	103	70-130
Arsenic	204	2.0	200	0.3	102	70-130
Lead	207	2.0	200	0.5	103	70-130
Selenium	209	4.0	200	1.6	104	70-130
Thallium	201	2.0	200	0.4	101	70-130

Matrix Spike (B6I2713-MS2)

Source: 1609031-10 Prepared: 9/28/2016 Analyzed: 10/7/2016





Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - ICP/MS - Quality Control

Batch: B6I2713 Sample Type: Liquid

Matrix Spike (B6I2713-MS2)

Source: 1609031-10 Prepared: 9/28/2016 Analyzed: 10/7/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit		Source Result	%REC	%REC Limits
Antimony	193	2.0	200	0.06	96.7	70-130
Arsenic	194	2.0	200		97.0	70-130
Lead	193	2.0	200	0.4	96.5	70-130
Selenium	192	4.0	200	0.1	96.1	70-130
Thallium	191	2.0	200	0.03	95.5	70-130

Matrix Spike Dup (B6I2713-MSD1)

Source: 1609020-02 Prepared: 9/28/2016 Analyzed: 10/7/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Antimony	200	2.0	200	0.05	100	70-130	2.54	20
Arsenic	198	2.0	200	0.3	98.9	70-130	3.05	20
Lead	202	2.0	200	0.5	101	70-130	2.79	20
Selenium	200	4.0	200	1.6	99.4	70-130	4.10	20
Thallium	197	2.0	200	0.4	98.2	70-130	2.27	20

Matrix Spike Dup (B6I2713-MSD2)

Source: 1609031-10 Prepared: 9/28/2016 Analyzed: 10/7/2016

Targets

			0						
ANALYTE	Result µg/L	Analyte p Qualifiers	Reporting Limit		Source Result	%REC	%REC Limits	RPD	RPD Limit
Antimony	199		2.0	200	0.06	99.5	70-130	2.81	20
Arsenic	198		2.0	200		99.0	70-130	2.11	20
Lead	197		2.0	200	0.4	98.4	70-130	1.96	20
Selenium	197		4.0	200	0.1	98.3	70-130	2.25	20
Thallium	194		2.0	200	0.03	97.0	70-130	1.54	20

Report Name: Project #: 16SF126

Page 122 of 129



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS - Quality Control

Batch: B6J0412 Sample Type: Liquid

Blank (B6J0412-BLK1)

Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit	
Mercury	II	0.200	

Blank (B6J0412-BLK2)

Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets

ANALYTE		Analyte Reporting Qualifiers Limit	
Mercury	U	0.200	

Blank (B6J0412-BLK3)

Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets

ANALYTE	Result μg/L	Analyte Reporting Qualifiers Limit
Mercury	IJ	0.200

Blank (B6J0412-BLK4)

Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets

	ANALYTE	Result µg/L	Analyte Qualifiers	
]	Mercury	IJ		0.200

LCS (B6J0412-BS1)

Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Metals by CLP ILMO5.3 - CVAAS - Quality Control

Batch: B6J0412 Sample Type: Liquid

LCS (B6J0412-BS1)

Prepared: 10/4/2016 Analyzed: 10/5/2016

ANALYTE	Result	Analyte Reporting	Spike	%REC
	µg/L	Qualifiers Limit	Level	%REC Limits
Mercury	1.13	0.200	1.00	113 80-120

Matrix Spike (B6J0412-MS1)

Prepared: 10/4/2016 Analyzed: 10/5/2016 Source: 1609020-02

Targets

ANALYTE	Result µg/L	Analyte Qualifiers					%REC Limits
Mercury	1.13		0.200	1.00	0.021	111	75-125

Matrix Spike (B6J0412-MS2)

Source: 1609031-10 Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets

ANALYTE		Analyte Qualifiers					%REC Limits
Mercury	1.16		0.200	1.00	0.167	99.3	75-125

Matrix Spike Dup (B6J0412-MSD1)

Prepared: 10/4/2016 Analyzed: 10/5/2016 Source: 1609020-02

Targets

	Result	Analyte _]	Reporting	Spike	Source		%REC		RPD
ANALYTE	$\mu g/L$	Qualifiers	Limit	Level	Result	%REC	Limits	RPD	Limit
Mercury	1.11		0.200	1.00	0.021	109	75-125	1.79	20

Matrix Spike Dup (B6J0412-MSD2)

Source: 1609031-10 Prepared: 10/4/2016 Analyzed: 10/5/2016

Targets

	ANALYTE	Result µg/L	Reporting Limit				%REC Limits	RPD	RPD Limit
I	Mercury	1.22	0.200	1.00	0.167	105	75-125	5.04	20



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

SURROGATE SUMMARY REPORT

VOA CLP Low Level

Liquid

LAB NUMBER	1,2-DCE-d4	TOL-d8	4-BFB
1609020-01	109	106	93.1
1609020-02	101	98.4	85.6
1609020-03	98.7	96.3	85.5
1609020-04	107	109	93.2
1609031-01	102	101	85.9
1609031-02	97.8	97.3	83.2
1609031-03	103	104	89.7
1609031-04	98.1	99.3	83.4
1609031-05	102	102	85.4
1609031-06	104	96.9	97.3
1609031-07	103	107	98.8
1609031-08	107	108	90.0
1609031-09	93.6	101	87.9
1609031-10	98.7	104	91.5
1609031-11	99.4	103	85.7
1609031-12	110	110	95.2
B6I2805-BLK1	98.8	96.9	84.3
B6I2805-BS1	107	107	108
B6I2805-MS1	106	103	90.9
B6I2805-MSD1	110	106	92.3

QC LIMITS

1,2-DCE-d4	=	1,2-Dichloroethane-d4	86 - 117
TOL-d8	=	Toluene-d8	85 - 113
4-BFB	=	4-Bromofluorobenzene	73 - 115



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Fax:(281)983-2248 Phone:(281)983-2100

Results

from

TCEQ Sugar Land Laboratory 12553 W. Airport Blvd Sugar Land, TX 77478



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Miscellaneous Results (TCEQ)

Batch: TCEQ Matrix: Liquid

		Cyanide, Total			
Laboratory ID	Station ID	mg/L	Analyte Qualifier	Specific Method	Date Analyzed
1609020-01	GW-03	<0.04		335.4	09/29/16
1609020-02	GW-04	<0.04		335.4	09/29/16
1609020-03	GW-06	<0.04		335.4	09/29/16
1609027-01	GW-07	<0.04		335.4	09/29/16
1609027-02	GW-09	<0.04		335.4	09/29/16
1609027-03	GW-12	<0.04		335.4	09/29/16
1609027-04	GW-17	<0.04		335.4	09/29/16
1609031-01	ER-160922	<0.04		335.4	09/29/16
1609031-03	GW-08	<0.04		335.4	09/29/16
1609031-04	GW-08-D	<0.04		335.4	09/29/16
1609031-06	GW-10	< 0.04		335.4	09/29/16
1609031-07	GW-10-D	<0.04		335.4	09/29/16
1609031-09	GW-13-119	<0.04		335.4	09/29/16
1609031-10	GW-14	<0.04		335.4	09/29/16



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

Notes and Definitions

J The identification of the analyte is acceptable; the reported value is an estimate.

FB Field Blank Related - The concentration found in the sample was less than 10X the concentration found in

the associated field, trip, or equipment blank. Presence in the sample is therefore suspect.

В Blank Related - The concentration found in the sample was less than 10X the concentration found in the

associated extraction, digestion and/or analysis blank. Presence in the sample is therefore suspect.

This sample was extracted at a single acid pH. A

HTS Sample was prepared and/or analyzed past recommended holding time. Concentrations should be

considered minimum values.

ABN Acid Base Neutrals (Semivolatile Compounds)

AES Atomic Emission Spectrometer

BS Blank Spike

CVAA Cold Vapor Atomic Absorption

DCB Decachlorobiphenyl

ECD Electron Capture Detector

GCGas Chromatograph

ICP Inductively Coupled Plasma

Internal Standard **ISTD**

LCS Laboratory Control Sample

MS Mass Spectrometer

Matrix Spike/Matrix Spike Duplicate MS/MSD

NA Not Applicable

NPD Nitrogen Phosphorous Detector

NR Not Reported

PCB Polychlorinatedbiphenyl



Region 6 Laboratory

10625 Fallstone Road, Houston, TX 77099 Phone:(281)983-2100 Fax:(281)983-2248

RL Reporting Limit

RT Retention Time

RPD Relative Percent Difference

TCLP Toxicity Characteristic Leaching Procedure

TCMX Tetrachloro-meta-xylene

U Undetected

VOA Volatile Organic Analysis

Initial pressure in air analyses is the pressure at which the canister was received in psia (pounds *per* square inch absolute pressure).

The pH reported for Volatile liquid samples was tested using a 0-14 pH indicator strip for the purpose of verifying chemical preservation.

The statistical software used for the reporting of toxicity data is ToxCalc 5.0.32, Environmental Toxicity Data Analysis System 1994-2007 Tidepool Scientific Software.

Project #: 16SF126 Report Name:

DateShipped: 9/19/2016 CarrierName: FedEx AirbillNo: 7772 6100 6977

CHAIN OF CUSTODY RECORD

Case #:

No: 6-091916-133606-0001

Lab EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use
GW-03		Ground Water/ Jason Stroup	Grab	EDB(35), VOA(35)	1005 (Ice to 4C & HCL), 1006 (Ice to 4C & HCL) (5)	GW-03	09/19/2016 15:44	Only
GW-04		Ground Water/ Jason Stroup	Grab	EDB(35), VOA(35)	1010 (Ice to 4C & HCL), 1011 (Ice to 4C & HCL) (15)	GW-04	09/19/2016 14:30	
GW-06		Ground Water/ Jason Stroup	Grab	EDB(35), VOA(35)	1015 (Ice to 4C & HCL), 1016 (Ice to 4C & HCL) (5)	GW-06	09/19/2016 17:07	
TB-160919-1		Water/ Aaron Bugher	Grab	VOA(35)	1055 (Ice to 4C & HCL) (3)	TB-160919-1	09/19/2016 13:30	
		0,5						

Sample(s) to be used for Lab QC: GW-04 Tag 1010, GW-04 Tag 1011

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

Analysis Key ED8=EDB, VOA=VOA

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	EA	9-19-16/1800	anon Engla EA	9-19-16/1800	The second of th
	Word Penghaka	9-19-16/2000		9-19-16/2000	
	/		& Cross	9/20/16	
			TempBlank=1°C	.,,	

DateShipped: 9/19/2016 CarrierName: FedEx AirbillNo: 7772 6104 2666

CHAIN OF CUSTODY RECORD

Case #

No: 6-091916-134400-0003

Lab: EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection	For Lab Us
GW-03		Ground Water/ Jason Stroup	Grab	Hex Cr(35), TM + Hg(35), CN(35)	1007 (Ice to 4C & NH4OH/(NH4)2SO4), 1008 (Ice to 4C & HNO3), 1009 (Ice to 4C & NaOH) (3)	GW-03	Date/Time 09/19/2016 15:44	Only
GW-04		Ground Water/ Jason Stroup	Grab	Hex Cr(35), TM + Hg(35), CN(35)	1012 (Ice to 4C & NH4OH/(NH4)2SO4), 1013 (Ice to 4C & HNO3), 1014 (Ice to 4C & NaOH) (6)	GW-04	09/19/2016 14:30	
GW-06		Ground Water/ Jason Stroup	Grab	Hex Cr(35), TM + Hg(35), CN(35)	1017 (Ice to 4C & NH4OH/(NH4)2SO4), 1018 (Ice to 4C & HNO3), 1019 (Ice to 4C & NaOH) (3)	GW-06	09/19/2016 17:07	

Sample(s) to be used for Lab QC. GW-04 Tag 1012, GW-04 Tag 1013, GW-04 Tag 1014

Analysis Key, Hex Cr=Hexavalent Chromium, TM + Hg=Total Metals + Hg, CN=Cyanide

Shipment for Case Complete? N Samples Transferred From Chain of Custody #

Items/Reason	Relinquished by (Signature and Organizati	on) Date/Time	Received by (Signature and Organization)	ion) Date/Time	Sample Condition Upon Receipt
		A 9-19-16/1800	arran Broke E	7 9-19-16/180	0
	Clarin Buffy For	9-19-16/2000	FEDEN CONSTROL	9-19-16/2001	
	0	5.6	& Ciosi	9/26/16	
			~ ~		

remp Diank=1°

DateShipped: 9/21/2016 CarrierName: FedEx AirbillNo: 7772 8675 9826

CHAIN OF CUSTODY RECORD

Case #

No: 6-092016-083652-0006

Lab. EPA Region 6 Laboratory Lab Contact Christy Warren

Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
GW-17		Ground Water/ Ryan Guth	Grab	Hex Cr(35), TM + Hg(35), CN(35)	2047 (Ice to 4C & NH4OH/(NH4)2SO4), 2048 (Ice to 4C & HNO3), 2049 (Ice to 4C & NaOH) (3)	GW-17	09/21/2016 17:36	Omy
GW-07		Ground Water/ Jason Stroup	Grab	Hex Cr(35), TM + Hg(35), CN(35)	1022 (Ice to 4C & NH4OH/(NH4)2SO4), 1023 (Ice to 4C & HNO3), 1024 (Ice to 4C & NaOH) (3)	GW-07	09/21/2016 10:59	
GW-09		Ground Water/ Ryan Guth	Grab	Hex Cr(35), TM + Hg(35), CN(35)	1032 (Ice to 4C & NH4OH/(NH4)2SO4), 1033 (Ice to 4C & HNO3), 1034 (Ice to 4C & NaOH) (3)	GW-09	09/21/2016 16:51	
GW-12		Ground Water/ Jason Stroup	Grab	Hex Cr(35), TM + Hg(35), CN(35)	1042 (Ice to 4C & NH4OH/(NH4)2SO4), 1043 (Ice to 4C & HNO3), 1044 (Ice to 4C & NaOH) (3)	GW-12	09/21/2016 13 32	

Shipment for Case Complete? N Special Instructions: Samples Transferred From Chain of Custody # Analysis Key: Hex Cr=Hexavalent Chromium, TM + Hg=Total Metals + Hg, CN=Cyanide

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	So FA	9-21-16/1800	auron Busher F	1 9-21-16 / 1800	
	Phil EA	9746/1900	auren Braden - Et	1921-16/1900	
	Carch But EA	9-71-16/2000	Feder (carrier)	971-1/3-00	
		THE COU	Allen	9/22/16	
		_	Tomo Blank - 100	9:20	

DateShipped: 9/22/2016 CarrierName: FedEx

AirbillNo: 7772 9063 8703

Special Instructions:

CHAIN OF CUSTODY RECORD

No: 6-091916-134413-0004

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Lab Contact Christy Warren Lab Phone: 281-983-2137

Case #:

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll, Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
GW-17		Ground Water/ Ryan Guth	Grab	VOA(35)	2046 (Ice to 4C & HCL) (3)	GW-17	09/21/2016 17 36	300
TB-160920-1		Water/ Aaron Bugher	Grab	VOA(35)	1056 (Ice to 4C & HCL) (3)	TB-160920-1	09/20/2016 09:00	

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receip
	EA EA	9-22-16/ 1600	accon Bush EA	9-27-16/ 1600	
	192 EA	9-22-16/ 1700	Mason Bush EA	9-22-16/1740	
	Quean Bolen EA	972-16/ 1800	PESCE (colored)	9-22-16/1600	
	1	/	Lang BI ank = 1	9123/16	

DateShipped: 9/22/2016 CarrierName: FedEx AirbillNo: 7772 9063 8703

CHAIN OF CUSTODY RECORD

Case #:

No: 6-091916-134413-0004

Lab EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
ER-160922	- 13.5%	Water/ Jason Stroup	Grab	VOA(35)	1051 (Ice to 4C & HCL) (3)	ER-160922	09/22/2016 13:40	
GW-07		Ground Water/ Jason Stroup	Grab	VOA(35)	1021 (Ice to 4C & HCL) (3)	GW-07	09/21/2016 10 59	
GW-08		Ground Water/ Aaron Bugher	Grab	VOA(35)	1026 (Ice to 4C & HCL) (3)	GW-08	09/22/2016 14:25	
GW-08-D		Ground Water/ Aaron Bugher	Grab	VOA(35)	1066 (Ice to 4C & HCL) (3)	GW-08-D	09/22/2016 14:25	
GW-09		Ground Water/ Ryan Guth	Grab	VOA(35)	1031 (Ice to 4C & HCL) (3)	GW-09	09/21/2016 16:51	
GW-10		Ground Water/ Jason Stroup	Grab	VOA(35)	1036 (Ice to 4C & HCL) (3)	GW-10	09/22/2016 15:23	
GW-10-D		Ground Water/ Jason Stroup	Grab	VOA(35)	1061 (Ice to 4C & HCL) (3)	GW-10-D	09/22/2016 15:23	31
GW-12		Ground Water/ Jason Stroup	Grab	VOA(35)	1041 (Ice to 4C & HCL) (3)	GW-12	09/21/2016 13 32	
GW-13-119		Ground Water/ Jason Stroup	Grab	VOA(35)	1001 (Ice to 4C & HCL) (3)	GW-13-119	09/22/2016 12:29	
GW-14		Ground Water/ Jason Stroup	Grab	VOA(35)	1046 (Ice to 4C & HCL) (3)	GW-14	09/22/2016 10:03	

AND DESCRIPTION	
Canadal	Instructions:
Charle	mistructions.

Shipment for Case Complete? N
Samples Transferred From Chain of Custody #

Analysis Key: VOA=VOA

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receip
	EA	9-22-16/1600	ageon Brigher FA	9-27-16/1600	
	Gul EA	9-22-16/1700		9-22-16/1700	
	Caron Bunker FA	9-22-6/1800	TESTIX (coviner)	9-2246 1800	1
		(of Cross	9/23/16	
			Temp Blank	=100	

DateShipped: 9/22/2016 CarrierName: FedEx AirbillNo: 7772 9065 8819

CHAIN OF CUSTODY RECORD

Case #:

No: 6-092016-083658-0007

Lab EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
ER-160922		Water/ Jason Stroup	Grab	TM + Hg(35)	1053 (Ice to 4C & HNO3) (1)	ER-160922	09/22/2016 13:40	
GW-08		Ground Water/ Aaron Bugher	Grab	TM + Hg(35)	1028 (Ice to 4C & HNO3) (1)	GW-08	09/22/2016 14:25	
GW-08-D		Ground Water/ Aaron Bugher	Grab	TM + Hg(35)	1068 (Ice to 4C & HNO3) (1)	GW-08-D	09/22/2016 14:25	
GW-10		Ground Water/ Jason Stroup	Grab	TM + Hg(35)	1038 (Ice to 4C & HNO3) (1)	GW-10	09/22/2016 15:23	
GW-10-D		Ground Water/ Jason Stroup	Grab	TM + Hg(35)	1063 (Ice to 4C & HNO3) (1)	GW-10-D	09/22/2016 15:23	
GW-13-119		Ground Water/ Jason Stroup	Grab	TM + Hg(35)	1003 (Ice to 4C & HNO3) (1)	GW-13-119	09/22/2016 12:29	
GW-14		Ground Water/ Jason Stroup	Grab	TM + Hg(35)	1048 (Ice to 4C & HNO3) (2)	GW-14	09/22/2016 10 03).

Sample(s) to be used for Lab QC: GW-14 Tag 1048

Shipment for Case Complete? Y
Samples Transferred From Chain of Custody #

Analysis Key: TM + Hg=Total Metals + Hg

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	XX FA	9-22-6/1600	ann Buln E	7-9-12-1/1600	
	Clarky Baglion (A	9-22-4/ 1800	FEDEX (Covered)	9-22-16/1200	
	0 9	1	- Cion	9/2/3/14	
			One agreement of the second		

Temp Blank = o' Not Frozen

DateShipped: 9/22/2016 CarrierName: FedEx AirbillNo: 7772 9066 3369

CHAIN OF CUSTODY RECORD

Case #:

No: 6-092016-083702-0008

Lab EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
ER-160922	Sample No.	Water/ Jason Stroup	Grab	CN(35)	1054 (Ice to 4C & NaOH) (1)	ER-160922	09/22/2016 13:40	
GW-08		Ground Water/ Aaron Bugher	Grab	CN(35)	1029 (Ice to 4C & NaOH) (1)	GW-08	09/22/2016 14:25	
GW-08-D		Ground Water/ Aaron Bugher	Grab	CN(35)	1069 (Ice to 4C & NaOH) (1)	GW-08-D	09/22/2016 14:25	
GW-10		Ground Water/ Jason Stroup	Grab	CN(35)	1039 (Ice to 4C & NaOH) (1)	GW-10	09/22/2016 15:23	
GW-10-D		Ground Water/ Jason Stroup	Grab	CN(35)	1064 (Ice to 4C & NaOH) (1)	GW-10-D	09/22/2016 15:23	
GW-13-119		Ground Water/ Jason Stroup	Grab	CN(35)	1004 (Ice to 4C & NaOH) (1)	GW-13-119	09/22/2016 12:29	
GW-14		Ground Water/ Jason Stroup	Grab	CN(35)	1049 (Ice to 4C & NaOH) (2)	GW-14	09/22/2016 10:03	(8)

Sample(s) to be used for Lab QC: GW-14 Tag 1049

Shipment for Case Complete? Y Samples Transferred From Chain of Custody #

Analysis Key: CN=Cyanide

Items/Reason	Relinquished	(Signature and Organiza	ition) Date/Time	Received by (Signature and Organiza	tion) Date/Time	Sample Condition Upon Receipt
MSC/SC/2855	K		EA 977-4/ 1600	Caron Bucher	EA9-72-16/140	
	1	X	Za I Long	CIX (540)	000 W/ 1000	
	Garles	tenfer 1	1922-16/1800	tegly (course)	9-12-19 1800	
		U	_	1 Crown	9:05	
				4	1	

Temp Blank = 6° NOT Frozen

DateShipped 9/22/2016 CarrierName FedEx AirbillNo: 7772 9637 7961

CHAIN OF CUSTODY RECORD

Case #. 46417

No: 6-092216-083810-0030

Lab EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
GW-09-Cr6		Ground Water/ Aaron Bugher	Grab	Hex Cr(35)	4032 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	GW-09-Cr6	09/22/2016 14:00	Only
ER-160922		Water/ Jason Stroup	Grab	Hex Cr(35)	1052 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	ER-160922	09/22/2016 13:40	
GW-08		Ground Water/ Aaron Bugher	Grab	Hex Cr(35)	1027 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	GW-08	09/22/2016 14:25	
GW-08-D		Ground Water/ Aaron Bugher	Grab	Hex-Cr(35)	1067 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	GW-08-D	09/22/2016 14:25	
GW-10		Ground Water/ Jason Stroup	Grab	Hex Cr(35)	1037 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	GW-10	09/22/2016 15:23	
GW-10-D		Ground Water/ Jason Stroup	Grab	Hex Cr(35)	1062 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	GW-10-D	09/22/2016 15:23	
GW-13-119		Ground Water/ Jason Stroup	Grab	Hex Cr(35)	1002 (Ice to 4C & NH4OH/(NH4)2SO4) (1)	GW-13-119	09/22/2016 12:29	
GW-14		Ground Water/ Jason Stroup	Grab	Hex Cr(35)	1047 (Ice to 4C & NH4OH/(NH4)2SO4) (2)	GW-14	09/22/2016 10:03	

Sample(s) to be used for Lab QC: GW-14 Tag 1047

Shipment for Case Complete? Y Samples Transferred From Chain of Custody #

Analysis Key: Hex Cr=Hexavalent Chromium

Items/Reason	Relinquished by (Signature and Organizatio	n) Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receip	
	A E	9-22-16/1600	Garan Bagker E	4 9-22-16/1600	·	
	anter Buffren &+	7 9-22-14/1904	FEDEX (convier)	9-22-16/1900	e)	
	V		A Cini	9/23/14	-	
			\$ 000	7:05		

Temp Blank=1°

DateShipped: 9/22/2016 CarrierName: FedEx AirbillNo: 7772 9066 7114

CHAIN OF CUSTODY RECORD

Case #:

No: 6-092216-090053-0031

Lab: EPA Region 6 Laboratory Lab Contact: Christy Warren Lab Phone: 281-983-2137

Sample Identifier	CLP	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
TB-160922-1	Sample No.	Water/ Aaron	Grab	EDB(35)	3056 (Ice to 4C & HCL) (2)	TB-160922-1	09/22/2016 09:00	
ER-160922		Bugher Water/ Jason	Grab	EDB(35)	1050 (Ice to 4C & HCL) (2)	ER-160922	09/22/2016 13:40	
GW-07		Ground Water/ Jason Stroup	Grab	EDB(35)	1020 (Ice to 4C & HCL) (2)	GW-07	09/21/2016 10:59	
GW-08		Ground Water/ Aaron Bugher	Grab	EDB(35)	1025 (Ice to 4C & HCL) (2)	GW-08	09/22/2016 14:25	
GW-08-D		Ground Water/ Aaron Bugher	Grab	EDB(35)	1065 (Ice to 4C & HCL) (2)	GW-08-D	09/22/2016 14:25	
GW-09		Ground Water/ Ryan Guth	Grab	EDB(35)	1030 (Ice to 4C & HCL) (2)	GW-09	09/21/2016 16:51	
GW-10		Ground Water/ Jason Stroup	Grab	EDB(35)	1035 (Ice to 4C & HCL) (2)	GW-10	09/22/2016 15:23	8
GW-10-D		Ground Water/ Jason Stroup	Grab	EDB(35)	1060 (Ice to 4C & HCL) (2)	GW-10-D	09/22/2016 15:23	
GW-12		Ground Water/ Jason Stroup	Grab	EDB(35)	1040 (Ice to 4C & HCL) (2)	GW-12	09/21/2016 13:32	
GW-13-119		Ground Water/ Jason Stroup	Grab	EDB(35)	1000 (Ice to 4C & HCL) (2)	GW-13-119	09/22/2016 12:29	

Special Instructions:

Analysis Key: EDB=EDB

Items/Reason Relinquished by Signature and Organization) Date/Time Received by (Signature and Organization) Date/Time Sample Condition Upon Receipt

EA 921-16/1600 Carrin Burghor EA 9-21-16/1600

EA 921-16/1800 Carrin Burghor EA 921-16/1600

EA 921-16/1800 Carrin Burghor EA 921-16/1800

EA 921-16/1800 EA 921-16/1800

EA 921-

DateShipped 9/22/2016 CarnerName FedEx AirbillNo 7772 9066 7114

Special Instructions:

CHAIN OF CUSTODY RECORD

No: 6-092216-090053-0031

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Lab Contact: Christy Warren Lab Phone: 281-983-2137

Case #:

Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	For Lab Use Only
GW-14		Ground Water/ Jason Stroup	Grab	EDB(35)	1045 (Ice to 4C & HCL) (2)	GW-14	09/22/2016 10:03	
GW-17		Ground Water/ Ryan Guth	Grab	EDB(35)	2045 (Ice to 4C & HCL) (2)	GW-17	09/21/2016 17:36	

Analysis Key: EDE		MIL SERGONINA SE		112000000000000000000000000000000000000	a Contraction Deposit
Items/Reason	Relinquished by (Signature and Organization) Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	1 9 4	9-22-16/1600	aucen Bugher EA	922-16/160	
	/h/ X 84	9-22-16/1700	Olaran Banga Sp	9-22-16/17-01	
	ander Busher Kt	9-22-16/1900	FCJEY (course)	9-22-16/1900	
	0		& Cron	9/23/16	